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(54) Title: ANTIMICROBIAL QUINOLONE DERIVATIVES AND USE OF THE SAME TO TREAT BACTERIAL INFECTIONS

(57) Abstract: Substituted quinolone derivatives in which an oxazolidinone, isoxazolinone, or isoxazoline is covalently bonded to a quinolone, methods of using the quinolone derivatives, and pharmaceutical compositions containing the quinolone derivatives are disclosed. Methods of synthesizing these substituted quinolone derivatives are also disclosed, and in particular a method of manufacturing a 7-(2-oxo-1,3-oxazolidin-3-yl)aryl-3-quinolinecarboxylic acid by condensing a 4-(2-oxo-1,3-oxazolidin-5-yl)aryl boronic acid with a 7-halo-quinolone derivative. The quinolone derivatives possess antibacterial activity, and are effective against a number of human and veterinary pathogens in the treatment of bacterial diseases.



WO 02/059116 A2